

WHAT IS CLAIMED IS:

1. A fixing apparatus, comprising:  
magnetic flux generation means for  
generating a magnetic flux by energization,  
5 an induction heating member for generating  
heat by the magnetic flux generated by said magnetic  
flux generating means to heat an unfixed image on a  
recording material by the generated heat,  
temperature detection means for detecting a  
10 temperature of said induction heating member,  
temperature control means for controlling the  
temperature of said induction heating member to a  
predetermined target temperature on the basis of  
information of said temperature detection means,  
15 heat generating rate change means for  
changing a heat generating rate of said induction  
heating means, and  
density detection means for detecting  
information as to a density of an image to be formed  
20 on the recording material,  
wherein said heat generating rate change  
means changes the heat generating rate on the basis of  
the information of said density detection means.
- 25 2. A fixing apparatus, comprising:  
magnetic flux generation means for  
generating a magnetic flux by energization,

an induction heating member for generating heat by the magnetic flux generated by said magnetic flux generating means to heat an unfixed image on a recording material by the generated heat,

5            temperature detection means for detecting a temperature of said induction heating member,

            temperature control means for controlling the temperature of said induction heating member to a predetermined target temperature on the basis of  
10          information of said temperature detection means,

            heat generating rate change means for changing a heat generating rate of said induction heating means, and

            density detection means for detecting  
15          information as to a density of an image to be formed on the recording material,

            wherein said heat generating rate change means changes the heat generating rate on the basis of the information of said density detection means  
20          without changing the predetermined target temperature.

3.    An apparatus according to Claim 1 or 2, wherein said magnetic flux generation means has an exciting coil, and said heat generating rate change  
25          means changes the heat generating rate by changing a frequency of a high-frequency current to be applied to the exciting coil.

4. An apparatus according to Claim 1 or 2,  
wherein said heat generating rate change means changes  
an electric power for energizing said magnetic flux  
5 generation means.

5. An apparatus according to Claim 1 or 2,  
wherein said magnetic flux generation means has an  
exciting coil, and said heat generating rate change  
10 means changes a current to be applied to the exciting  
coil of said magnetic flux generation means.

6. An apparatus according to Claim 1 or 2,  
wherein said magnetic flux generation means has an  
15 exciting coil, and said heat generating rate change  
means changes a voltage to be applied to the exciting  
coil of said magnetic flux generation means.

7. An image forming apparatus, comprising:  
20 image forming means for forming an unfixed  
image on a recording material,  
magnetic flux generation means for  
generating a magnetic flux by energization,  
an induction heating member for generating  
25 heat by the magnetic flux generated by said magnetic  
flux generating means to heat the unfixed image on the  
recording material by the generated heat,

temperature detection means for detecting a temperature of said induction heating member,

temperature control means for controlling the temperature of said induction heating member to a  
5 predetermined target temperature on the basis of information of said temperature detection means,

heat generating rate change means for changing a heat generating rate of said induction heating means, and

10 density detection means for detecting information as to a density of an image to be formed on the recording material,

wherein said heat generating rate change means changes the heat generating rate on the basis of  
15 the information of said density detection means.

8. An image forming apparatus, comprising:

image forming means for forming an unfixed image on a recording material,

20 magnetic flux generation means for generating a magnetic flux by energization,

an induction heating member for generating heat by the magnetic flux generated by said magnetic flux generating means to heat the unfixed image on the  
25 recording material by the generated heat,

temperature detection means for detecting a temperature of said induction heating member,

temperature control means for controlling the temperature of said induction heating member to a predetermined target temperature on the basis of information of said temperature detection means,

5           heat generating rate change means for changing a heat generating rate of said induction heating means, and

          density detection means for detecting information as to a density of an image to be formed  
10 on the recording material,

          wherein said heat generating rate change means changes the heat generating rate on the basis of the information of said density detection means without changing the predetermined target temperature.

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9. An apparatus according to Claim 7 or 8, wherein said magnetic flux generation means has an exciting coil, and said heat generating rate change means changes the heat generating rate by changing a  
20 frequency of a high-frequency current to be applied to the exciting coil.

10. An apparatus according to Claim 7 or 8, wherein said heat generating rate change means changes  
25 an electric power for energizing said magnetic flux generation means.

11. An apparatus according to Claim 7 or 8,  
wherein said magnetic flux generation means has an  
exciting coil, and said heat generating rate change  
means changes a current to be applied to the exciting  
5 coil of said magnetic flux generation means.

12. An apparatus according to Claim 7 or 8,  
wherein said magnetic flux generation means has an  
exciting coil, and said heat generating rate change  
10 means changes a voltage to be applied to the exciting  
coil of said magnetic flux generation means.

13. A fixing apparatus, comprising:  
a heating member for heating an unfixed image  
15 on a recording material,  
heating means for generating heat by  
energization to heat said heating member,  
temperature detection means for detecting a  
temperature of said heating member,  
20 temperature control means for controlling the  
temperature of said heating member to a predetermined  
target temperature on the basis of information of said  
temperature detection means,  
electric power change means for changing an  
25 electric power of said heating means, and  
density detection means for detecting  
information as to a density of an image to be formed

on the recording material,

wherein said heat generating rate change means changes the heat generating rate on the basis of the information of said density detection means  
5 without changing the predetermined target temperature.

14. An apparatus according to Claim 13, wherein said electric power change means changes a current applied to said heating means.

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15. An apparatus according to Claim 13, wherein said electric power change means changes a voltage applied to said heating means.

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16. An image forming apparatus, comprising:  
image forming means for forming an unfixed image on a recording material,  
a heating member for heating the unfixed image on the recording material,

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heating means for generating heat by energization to heat said heating member,  
temperature detection means for detecting a temperature of said heating member,

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temperature control means for controlling the temperature of said heating member to a predetermined target temperature on the basis of information of said temperature detection means,

electric power change means for changing an  
electric power of said heating means, and

density detection means for detecting  
information as to a density of an image to be formed  
5 on the recording material,

wherein said heat generating rate change  
means changes the heat generating rate on the basis of  
the information of said density detection means  
without changing the predetermined target temperature.

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17. An apparatus according to Claim 16, wherein  
said electric power change means changes a current  
applied to said heating means.

15 18. An apparatus according to Claim 16, wherein  
aid electric power change means changes a voltage  
applied to said heating means.

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